CLAIMS

1. A polynucleotide according to any one of the following (a) to (d):
(a) a polynucleotide comprising the protein coding region of the nucleotide sequence of SEQ ID NO: 1,
(b) a polynucleotide encoding a protein comprising the amino acid sequence of SEQ ID NO: 2,
(c) a polynucleotide encoding a protein that comprises the amino acid sequence of SEQ ID NO: 2 in which one or more amino acids have been substituted, deleted, inserted, and/or added, and is functionally equivalent to the protein comprising the amino acid sequence of SEQ ID NO: 2, and,
(d) a polynucleotide that (a) hybridizes to a polynucleotide comprising the nucleotide sequence of SEQ ID NO: 1 under stringent conditions, and (b) encodes a protein functionally equivalent to the protein comprising the amino acid sequence of SEQ ID NO: 2.

2. A polynucleotide encoding a partial peptide of a protein encoded by a polynucleotide according to claim 1.

3. A protein encoded by a polynucleotide according to claim 1 or 2.

4. A vector into which a polynucleotide according to claim 1 or 2 has been inserted.

5. A transformantharboring a polynucleotide according to claim 1 or 2, or the vector according to claim 4.

6. A method for producing the protein according to claim 3, wherein said method comprises the steps of culturing the transformant according to claim 5 and recovering the expression product.

7. An antibody against the protein according to claim 3.

8. An immunological method for assaying the protein according to claim 3, wherein said method comprises the step of detecting an immunological reaction between the antibody according to claim 7 and the protein according to claim 3.

9. A polynucleotide comprising at least 15 nucleotides, wherein said polynucleotide comprises a nucleotide sequence complementary to a polynucleotide according to claim 1, or to a complementary strand thereof.

10. A primer for synthesizing a polynucleotide according to claim 1, which comprises the polynucleotide according to claim 9.

11. A probe for detecting a polynucleotide according to claim 1, which comprises the polynucleotide according to claim 9.

12. An antisense DNA against a polynucleotide according to claim 1, or a portion thereof.

13. A method of screening for a compound binding to the protein according to claim 3, wherein said method comprises the steps of:

(a) contacting the protein according to claim 3 with a test sample, and,

(b) selecting a compound binding to the protein.

14. A compound binding to the protein according to claim 3, which is isolated by a method as set forth in claim 13.

15. A method of screening for a compound regulating the incorporation of a long chain fatty acid to a cell expressing the protein according to claim 3, wherein said method comprises the steps of:

(a) contacting the cell expressing the protein according to claim 3 with the labeled long chain fatty acid and a test sample, and incubating the mixture,

(b) measuring the activity of incorporating the long chain fatty acid into the cell, and,

(c) selecting a compound regulating the incorporation activity based on a comparison with the activity measured in the absence of the test sample.

16. A compound for regulating the incorporation of a long chain fatty acid to a cell expressing the protein according to claim 3, wherein the compound is isolated by a method as set forth in claim 15.